

What is claimed is:

1. A composition for inhibiting bacterial biofilms on devices comprising a composition selected from the group consisting of:
  - (a) a thiol-specific reagent and a cationic polypeptide;
  - (b) a thiol-specific reagent and an iron-sequestering glycoprotein; and
  - (c) a thiol-specific reagent and a quaternary ammonium compound.
2. The compositions of claim 1, wherein the thiol-specific reagent is between about 12.5 mg/L and about 100 mg/L of the composition.
3. The compositions of claim 1, wherein the cationic polypeptide is between about 12.5 mg/L and about 100 mg/L of the composition.
4. The compositions of claim 1, wherein the iron-sequestering glycoprotein is between about 125 mg/L and about 1000 mg/L of the composition.
5. The composition of claim 1, wherein the composition is effective against biofilms produced by gram-negative bacterial species selected from the group consisting of *Escherichia coli*, *Proteus mirabilis*, *Klebsiella pneumoniae* and *Pseudomonas aeruginosa*.
6. The composition of claim 1, wherein the composition is effective against biofilms produced by gram-positive bacterial species selected from the group consisting of *Enterococcus faecalis* and *Staphylococcus epidermidis*.
7. The composition of claim 1, wherein the thiol-specific reagent is selected from a group consisting of N-ethylmaleimide (NEM), 5,5-dithiobis-(2-nitrobenzoic acid)(DTNB), 2-nitro-5-thiocyanobenzoic acid (NTCB), P-hydroxymercuribenzoic acid (pHMB), iodoacetamide (IA), N-phenylmaleimide (PheM), N-(1-pyrenyl) maleimide (PyrM), naphthalene-1,5-dimaleimide (NDM), N,N'-(1,2-phenylene) dimaleimide (oPDM), N,N'-1,4-phenylene dimaleimide (pPDM), N,N'-1,3-phenylene dimaleimide (mPDM), 1,1-(methylenedi-4,1-phenylene)bismaleimide(BM), 4-(N-aleimido) phenyltrimethylammonium (MPTM), N,N'-bis(3-maleimidopropionyl)-2-hydroxy-1,3-propanediamine (BMP), p-chloromercuribenzene sulphonic acid and thiosulfates.
8. The composition of claim 1, wherein the cationic polypeptide is selected from a group consisting of protamine sulfate, polylysine, defensin, lactoperoxidase and lysozyme.

9. The composition of claim 1, wherein the iron sequestering glycoprotein is selected from a group consisting of ovotransferrin, lactoferrin and serotransferrin.
10. The composition of claim 1, further comprising one or more ingredients selected from the group consisting of: an organic solvent, a binding or bonding or coupling agent, a surfactant, a quaternary ammonium compound and an antibiotic.
11. The composition of claim 1, wherein the thiol-specific reagent is N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide and the cationic polypeptide is protamine sulfate.
12. The compositions of claim 11, wherein the N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide is present as about 0.1 mg/ml and the protamine sulfate is present as about 0.1 mg/ml.
13. The composition of claim 1, wherein the thiol-specific reagent is N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide and the glycoprotein is ovotransferrin.
14. The compositions of claim 13, wherein the N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide is present as about 0.1 mg/ml and or the ovotransferrin is present as about 1 mg/ml.
15. The composition of claim 1, further comprising dimethyl sulfoxide or methanol.
16. A method of preparing a device comprising treating at least one surface of the device with the composition of claim 1.
17. The method as claimed in claim 16, wherein the composition comprises an effective amount of N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide and protamine sulfate.
18. The method as claimed in claim 16, wherein the composition comprises an effective amount of N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide and ovotransferrin.
19. The method of preparing a device comprising coating a device with the composition of claim 1.
20. The method as claimed in claim 19, wherein the composition comprises an effective amount of N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide and protamine sulfate.

21. The method as claimed in claim 19, wherein the composition comprises an effective amount of N,N'-(1,2-phenylene) dimaleimide or N-(1-pyrenyl) maleimide and ovotransferrin
22. The method as claimed in claim 19, wherein the method comprises treating the device with a quaternary ammonium compound before coating the device with the composition.
23. The method as claimed in claim 22, wherein the quaternary ammonium compound is selected from the group consisting of tridodecylmethyl ammonium chloride and benzalkonium chloride.
24. The method as claimed in claim 16, wherein the composition further comprises hydrogel.
25. The method as claimed in claim 16, further comprising coating the device with a hydrogel selected from the group consisting of polyvinylpyrrolidone-hydrogel, polyvinyl alcohol-hydrogel and polyethylene glycol-hydrogel.
26. The method as claimed in claim 16, wherein the device is a medical device.
27. The method as claimed in claim 26, wherein the device is a catheter.
28. The method of claim 27, wherein the catheter is an indwelling catheter.
29. The method of claim 28, wherein the indwelling catheter is selected from a group consisting of a urinary catheter, a peritoneal catheter, an umbilical catheter, a suction catheter and a mucous extraction catheter.
30. The method as claimed in claim 16, wherein the device is selected from the group consisting of catheters, contact lenses, intrauterine devices, dental prostheses, orthodontic devices, stomach tubes, endotracheal tubes, dental water lines, compression bandages, tissue dressings, wound dressings, surgical tapes, occlusive patches and external prostheses.
31. The method as claimed in claim 16, wherein the device selected from the group consisting of pipes, heat exchangers and computer chips.
32. The method of preparing a device comprising incorporating the composition of claim 1 into polymers, which are used to form the device.
33. The method of preparing a device comprising impregnating the composition of claim 1 into the device.

34. The method as claimed in claim 16, wherein the quaternary ammonium compound is selected from the group consisting of benzalkonium chloride, tridodecyl methyl ammonium chloride, and didecyl dimethyl ammonium chloride.

35. The composition as claimed in claim 1, wherein the quaternary ammonium compound is selected from the group consisting of benzalkonium chloride, tridodecyl methyl ammonium chloride, and didecyl dimethyl ammonium chloride.